

**Amendments to the Claims:**

**Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1           Claim 1. (Amended) An apparatus, comprising:  
2           a direct memory access register adapted to hold a descriptor, said register comprising:  
3                 a command register comprising a compare enable bit and a single branch enable  
4 bit;  
5                 a source address register;  
6                 a target address register; and  
7                 a descriptor address register.

1           Claim 2. (Original) An apparatus as in claim 1, wherein said compare enable bit is  
2 adapted to indicate a comparison operation to be performed by a direct memory access controller  
3 based on said source address register and said target address register.

1           Claim 3. (Original) An apparatus as in claim 1, wherein said branch enable bit is adapted  
2 to indicate a branch operation to be performed by a direct memory access controller to access  
3 another descriptor.

1           Claim 4. (Original) An apparatus as in claim 1, further comprising a control status  
2 register, said control status register comprising a compare status bit.

1           Claim 5. (Original) An apparatus as in claim 4, wherein said branch enable bit is adapted  
2   to indicate a branch operation to be performed by a direct memory access controller to access  
3   another descriptor based on said compare status bit.

1           Claim 6 (Withdrawn) A system, comprising:  
2       a target;  
3       a source;  
4       a memory adapted to contain a first descriptor of a first type, a second descriptor of a  
5   second type, a third descriptor of a third type, and a fourth descriptor of said first type;  
6       a direct memory access controller coupled to said memory, said direct memory access  
7   controller adapted to transfer data from said source to said target based on said first descriptor,  
8   said direct memory access controller comprising a direct memory access register to hold said  
9   first descriptor, said second descriptor, or said third descriptor, said direct memory access  
10   register comprising a command register comprising a compare enable bit and a branch enable bit.

1           Claim 7. (Withdrawn) A system as in claim 6, said direct memory access register further  
2   comprising a source address register and a target address register.

1           Claim 8. (Withdrawn) A system as in claim 7, wherein said compare enable bit is adapted  
2   to indicate a comparison operation to be performed by said direct memory access controller  
3   based on said source address register and said target address register.

1           Claim 9. (Withdrawn) A system as in claim 6, wherein said branch enable bit is adapted  
2   to indicate a branch operation to be performed by said direct memory access controller to fetch  
3   said fourth descriptor or said third descriptor from said memory.

1           Claim 10. (Withdrawn) A system as in claim 9, wherein said first descriptor is adapted to  
2   indicate data transfer by said direct memory access controller, and wherein said third descriptor  
3   is adapted to indicate no data transfer by said direct memory access controller.

1           Claim 11. (Withdrawn) A system as in claim 6, said direct memory access controller  
2   further comprising a control status register, said control status register comprising a compare  
3   status bit.

1           Claim 12. (Withdrawn) A system as in claim 11, wherein said branch enable bit is  
2   adapted to indicate a branch operation to be performed by said direct memory access controller  
3   to fetch said fourth descriptor or said third descriptor from said memory based on said compare  
4   status bit.

1           Claim 13. (Withdrawn) A system as in claim 11, wherein said direct memory access  
2   controller is adapted to perform a comparison operation and a branch operation based on said  
3   branch enable bit, said comparison enable bit, and said compare status bit.

1           Claim 14. (Withdrawn) A machine-readable medium that provides instructions, which  
2   when executed by a computing platform, cause said computing platform to perform operations  
3   comprising a method of:

4           fetching a first descriptor of a first type, said first descriptor identifying a first source and  
5   a first target;

6           transferring a first data set over a direct memory access channel from said first source to  
7   said first target based on said first descriptor;

8           fetching a second descriptor of a second type, said second descriptor identifying a second  
9   source, said second descriptor comprising comparison data;

10          fetching data from said second source identified by said second descriptor;

11          comparing said data fetched from said second source and said comparison data to obtain  
12   a comparison result; and

13          fetching one of a fourth descriptor of said first type and a third descriptor of a third type  
14   based on said comparison result.

1           Claim 15. (Withdrawn) A machine-readable medium as in claim 14, wherein said fourth  
2   descriptor is fetched if said comparison result indicates said data fetched from said second source  
3   fails to match said comparison data.

1           Claim 16. (Withdrawn) A machine-readable medium as in claim 14, wherein said third  
2   descriptor is fetched if said comparison result indicates said data fetched from said second source  
3   matches said comparison data.

1           Claim 17. (Withdrawn) A machine-readable medium as in claim 14, wherein said second  
2   descriptor comprises a branch enable bit and a comparison enable bit, wherein said comparing  
3   data fetched is based on said comparison enable bit in said second descriptor, and said fetching  
4   one of said fourth descriptor and said third descriptor is based on said branch enable bit in said  
5   second descriptor.

1           Claim 18. (Withdrawn) A machine-readable medium as in claim 14, wherein said data  
2   fetched from said second source comprises a transfer status indicator.

1           Claim 19. (Withdrawn) A method, comprising:  
2           fetching a first descriptor of a first type, said first descriptor identifying a first source and  
3   a first target;  
4           transferring a first data set over a direct memory access channel from said first source to  
5   said first target based on said first descriptor;  
6           fetching a second descriptor of a second type, said second descriptor identifying a second  
7   source, said second descriptor comprising comparison data;  
8           fetching data from said second source identified by said second descriptor;  
9           comparing said data fetched from said second source and said comparison data to obtain  
10   a comparison result; and  
11           fetching one of a fourth descriptor of said first type and a third descriptor of a third type  
12   based on said comparison result.

1           Claim 20. (Withdrawn) A method as in claim 19, wherein said fourth descriptor is  
2    fetched if said comparison result indicates said data fetched from said second source fails to  
3    match said comparison data.

1           Claim 21. (Withdrawn) A method as in claim 19, wherein said third descriptor is fetched  
2    if said comparison result indicates said data fetched from said second source matches said  
3    comparison data.

1           Claim 22. (Withdrawn) A method as in claim 19, wherein said second descriptor  
2    comprises a branch enable bit and a comparison enable bit, wherein said comparing data fetched  
3    is based on said comparison enable bit in said second descriptor, and said fetching one of said  
4    fourth descriptor and said third descriptor is based on said branch enable bit in said second  
5    descriptor.

1           Claim 23. (Withdrawn) A machine-readable medium as in claim 19, wherein said data  
2    fetched from said second source comprises a transfer status indicator